

Amendments to the Claims

21. (currently amended) A method of negotiating maximal data compression of a modem relay channel, comprising:

determining a first maximal data compression on a first leg;

determining a second maximal data compression on a second leg;

comparing the first maximal data compression and the second maximal data compression;

selecting an end-to-end maximal data compression from the first and second maximal data compressions;

renegotiating only an unselected one of the first and second maximal data compressions;
and

~~notifying a gateway on a second leg of the maximal data compression on the first leg;~~

~~waiting until the gateway on the second leg has negotiated an end-to-end maximal data compression using the maximal data compression of the first leg; and~~

transmitting data using the end-to-end maximal data compression.

22. (previously presented) The method of claim 21, further comprising delaying negotiations on the second leg until a maximal data compression on the first leg has been determined.

23. (previously presented) The method of claim 21, further comprising storing the end-to-end maximal compression parameters in memory.

24. (previously presented) The method of claim 23, further comprising using the end-to-end maximal compression parameters stored in memory to prevent renegotiation by either the first leg or the second leg.

25. (currently amended) The method of claim 21, determining a maximal data compression on a first leg further comprising determining a maximal data compression on a called leg, and ~~notifying a gateway on the second leg further comprising notifying a gateway on the calling leg prior to determining a maximal data compression on the second leg such that the maximal data compression from the called leg is used to negotiate a maximal data compression on the calling leg~~ determining a maximal data compression on a second leg further comprising determining a maximal data compression on a calling leg.

26. (previously presented) The method of claim 25, the method further comprising delaying negotiations on the calling leg until notification is received from the called leg.

27. (previously presented) The method of claim 21, determining a maximal data compression on a first leg further comprising negotiating a maximal data compression on a calling leg and determining a maximal data compression on a second leg further comprising determining a maximal data compression on a called leg.

28. (currently amended) A network device, comprising:

a connector to allow the device to connect to a network and receive a signal from a remote gateway of a maximal data compression on a remote leg;

~~a local proxy negotiation mechanism to delay data compression negotiations until the signal is received;~~

~~a first-pass negotiation mechanism to negotiate a local maximal data compression based upon the maximal data compression on the remote leg~~

a dual first-pass negotiation mechanism to negotiate a first and a second maximal data compression capability for each of a first and second leg

an end-to-end compression capability determination mechanism to select an end-to-end maximal data compression capability from the first and second maximal data compression capabilities; and

a second pass end-to-end renegotiation mechanism to renegotiate only an unselected one of the first or second maximal data compression based upon the end-to-end maximal data compression capability ~~—— a signaling mechanism to signal the remote gateway that negotiations are complete.~~

29. (currently amended) The network device of claim 28, further comprising a store to store ~~an~~ the end-to-end maximal compression received from the remote leg determined by the end-to-end determination mechanism.

30. (currently amended) An article of computer-readable media containing a program that, when executed, causes a computer to:

determine a first maximal data compression on a first leg;

determine a second maximal data compression on a second leg;

compare the first maximal data compression and the second maximal data compression;

select an end-to-end maximal data compression from the first and second maximal data compressions;

renegotiate only an unselected one of the first and second maximal data compressions;
and

notify a gateway on a second leg of the maximal data compression on the first leg;

wait until the gateway on the second leg has negotiated an end-to-end maximal data compression using the maximal data compression of the first leg; and

transmitting data to the gateway on the second leg using the maximal end-to-end data compression.

31. (previously presented) The article of claim 30, the program further causing the computer store the end-to-end maximal compression parameters in memory.

32. (previously presented) The article of claim 30, the program further causing the computer to use the end-to-end maximal compression parameters stored in memory to prevent renegotiation by either the called leg or the calling leg.

33. (currently amended) A network device, comprising:

a means for allowing the device to connect to a network and receive a signal from a remote gateway of a maximal data compression on a remote leg;

a means for delaying data compression negotiations until the signal is received;

~~a means for negotiating a local maximal data compression based upon the maximal data compression on the remote leg~~

a means for negotiating a first and a second maximal data compression capability for each of a first and second leg

a means for selecting an end-to-end maximal data compression capability from the first and second maximal data compression capabilities; and

a means for renegotiating only an unselected one of the first or second maximal data compression based upon the end-to-end maximal data compression capability; and

a means for signaling the remote gateway that negotiations are complete.

34. (previously presented) The network device of claim 33, further comprising a means for storing an end-to-end maximal compression received from the remote leg.